

PLANAR ELECTRIC MOTOR WITH TWO SIDED MAGNET ARRAY

ABSTRACT OF THE DISCLOSURE

5 An electric motor comprising an upper coil array, a lower coil array and a magnet array movable relative to the coil arrays and interposed therebetween. The magnet array has an upper surface and a lower surface and comprises a plurality of wedge magnets disposed in a plane. Each wedge magnet has a magnetic polarity oriented at an angle relative to the plane. The magnets are arranged in groups, each group forming an upper resultant magnetic flux extending substantially perpendicular to the plane from said upper surface of the magnet array and a lower resultant magnetic flux extending substantially perpendicular to said plane from said lower surface of the magnet array. The upper coil array is operable to interact with the upper resultant magnetic flux and the lower coil array is operable to interact with the lower resultant magnetic flux to move the magnet array.